

July 2001

SUMMERTIME...AND THE LIVING IS EASY *(Except for Summer Hazards)*

Whether working outside at the Lab, taking care of your yard, or engaging in a favorite outdoor recreational activity, the return of warmer weather is a welcome relief from the cold of winter. Unfortunately, the hot, humid, sunny weather also brings along plenty of potential health hazards. Below are some tips to minimize your risks from some of the more common hazards that you are likely to encounter this summer.

HEAT

There are three types of heat-related illness: heat cramps, heat exhaustion, and heatstroke. See below for details.

Heat illness	Mechanism	Symptoms and signs	Medical attention?
Heat cramps	<i>Electrolyte depletion</i>	<i>Painful muscle spasms. Possible vomiting, chills, increased heart rate, low blood pressure.</i>	<i>Only if problems persist.</i>
Heat exhaustion	<i>Cardiovascular system overload</i>	<i>Profuse sweating and cold clammy pale skin. Possible headache, low blood pressure, dilated pupils, extreme weakness, giddiness, vomiting, and loss of consciousness.</i>	<i>If vomiting occurs or problems persist.</i>
Heatstroke	<i>Sweating stops</i>	<i>Skin red or spotted and body temperature increases. Possible confusion, convulsions, delirium, and loss of consciousness.</i>	<i>Medical emergency! Can be fatal.</i>


The first aid for any heat-related illness is basically the same: move to a cool place, apply cool wet cloths and fan, loosen clothing and raise feet 8-12 inches, and give plenty of fluids (if conscious). However, the best way to deal with heat illness is to prevent it. Reduce your activities, then gradually increase them over the first week of exposure, do not work alone, and drink a cup of cool water every 15-20 minutes. Contact your Senior Safety Officer for help in assessing hot work environments at the Lab and for other suggestions to control heat illness.

UV RADIATION

Excess solar exposure can damage your skin and increase your risk of skin cancer. If you plan to be outside, avoid the hours of 10 a.m. to 3 p.m., when the sun's ultraviolet (UV) radiation is at its peak. Cover exposed areas, wear a broad-brimmed hat, and use a sunscreen with a sun protection factor (SPF) of at least 15. For general use, sunglasses that block 95 percent of UV radiation are adequate. But you may need lenses that block 99 percent if you spend long hours in the sun, have had cataract surgery, or are taking a prescription medication that increases your sensitivity to UV radiation. If you do develop sunburn, taking ibuprofen (Advil, Motrin, Nuprin) or using a 1 percent hydrocortisone cream may provide pain relief. If your sunburn begins to blister, see a doctor.



BEES, WASPS, HORNETS



Bees, wasps, and hornets may be found throughout the site. Nests are located in or on buildings, structures, trees, or shrubs; or in the ground. Unless provoked, these insects are usually happy to leave you alone. To minimize contact, you should avoid wearing floral patterns or heavy scents; and use care with sweet foods/drinks and meats. Be alert for insects coming in and out of an opening such as a crack in a wall. Listen for the hum of an active colony. Be extra careful when moving junk that has been lying around. If a bee, wasp or hornet flies close to you, do not swat it away -- a slow quiet retreat is usually the preferred course of action.

If a honeybee stings you, the stinger will remain in your skin. This should be removed by scraping (e.g., with a credit card) rather than by pinching or tweezing, as this may squeeze more venom into the wound. For any sting, clean the site with soap and water and watch closely for the progression of symptoms, especially during the first 20 minutes. A mild local reaction can be managed with antihistamines (e.g., Benadryl). Sensitized individuals should consider carrying emergency kits to self-administer adrenaline (available via prescription). Emergency assistance may be required in the event of severe or rapidly progressing symptoms.

To arrange for subcontractor pest control, contact the FESS Services Department at X3824. A bee/wasp/hornet spray is available from the FNAL stockroom (Stock # 1950-101000) to address minor problems.

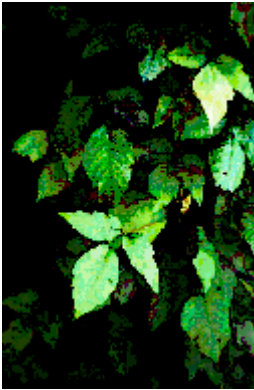
TICKS

Ticks can be more than a nuisance. Though relatively uncommon in Illinois, they have the potential to carry major disease organisms including Rocky Mountain spotted fever, Lyme disease and Ehrlichiosis. Symptoms include fever, headache, muscle and joint pain, stiff neck, rash and usually a lesion around the bite. If untreated, these health problems can be severe and involve long-term treatment.

You can reduce your risk of exposure by wearing light-colored clothing; staying near the center of trails; avoiding small shrubs and tall grass; covering up (tuck pants into socks, etc.), using a tick repellent containing DEET; and checking yourself, family and pets frequently for ticks. If you do discover a tick, grasp its mouthparts as close to the skin as possible with a fine tweezers and firmly and steadily pull back. Apply an antiseptic to the wound. Describe any symptoms of a tick bite to a doctor.



POISON IVY



Poison Ivy can be found throughout the site in open woods, fencerows, thickets, orchards, shrub beds and along buildings. It appears as a low bush or a vine growing high into trees. Leaves have three shiny leaflets that are pointed at the tip and 2-4 inches long. Leaf edges can be smooth or toothed. The stem is often covered with small fuzzy-appearing aerial roots. All parts of this plant contain an oily resin that is responsible for the well-known allergic response. The toxin immediately combines with skin proteins upon contact. Though washing reduces the potential for re-exposure by removing residual oil, it will not affect this initial chemical bond, and subsequent allergic response.

Learn to identify poison ivy and avoid contact. If you touch one of these plants, wash your skin immediately to minimize a reaction. Itching, reddened skin, blisters, and hive-like swelling may occur 48 to 72 hours after exposure. Soaking your skin in cool water, calamine lotion, or over-the-counter creams containing 1 percent hydrocortisone may offer relief. Prescription creams are available for severe itching. Seek medical attention if a severe and/or widespread reaction or signs of infection occur (redness, swelling, pus...).